

AMENDMENTS

In the claims

This listing of claims replaces all prior listings:

1. (Currently amended) A picture processing method comprising the steps of :
preparing in advance a non-Huber function picture energy function that does not contain a Huber function;

preparing an enlarged input picture;
calculating gradient values of said energy function for a pixel in the enlarged picture;
adding together a sum of the gradient values of said energy function and a value not dependent on the input picture to said pixel; and
updating ~~the resulting~~ a value of said pixel for picture quality adjustment using the result of said addition.

2. (Original) The picture processing method according to claim 1 wherein
the updating processing of the pixel value is repeated a plurality of number of times.

3. (Previously Presented) The picture processing method according to claim 1
wherein said value not dependent on the input picture is determined in advance from a plurality of pixels.

4. (Currently amended) A picture processing method comprising the steps of :
preparing in advance a non-Huber function picture energy function varied depending on an input picture that does not contain a Huber function.;
preparing an enlarged input picture ;
calculating a value which decreases said energy function ~~in~~ for a pixel of the enlarged picture;
adding said energy decreasing value to said pixel; and
updating ~~the resulting~~ a value of said pixel for picture quality adjustment using the result of said addition.

5. (Original) The picture processing method according to claim 4 wherein the energy function of the picture varied depending on the input picture is the sum total of the pixel energies changed with pixel values of plural pixels in the vicinity of each pixel.

6. (Original) The picture processing method according to claim 4 wherein the energy decreasing value is a product of a gradient value of the energy function in the pixel of the enlarged picture with the value not dependent on the input picture.

7. (Original) The picture processing method according to claim 4 wherein the updating processing of the pixel value is repeated a plurality of number of times.

8. (Previously Presented) A picture processing method comprising the steps of:
a first step of preparing in advance a non-Huber function picture energy function that does not contain a Huber function and preparing an enlarged input picture;

a second step of calculating a value which decreases said energy function for a pixel in the enlarged picture; and

a third step of adding said energy decreasing value to said pixel;

said second to third steps being repeated a pre-set number of times.

9. (Currently amended) A picture processing apparatus comprising:
holding means for holding a non-Huber function picture energy function, that does not contain a Huber function, prepared in advance;

enlarging means for enlarging an input picture;

calculating means for calculating a gradient values of said energy function ~~in~~ for a pixel in ~~said~~ the enlarged picture; and

updating means for adding to said pixel a product of a the gradient values of said energy function with a value not dependent on the input picture and for updating the resulting value of said pixel based on the results of said addition.

10. (Original) The picture processing apparatus according to claim 9 wherein the calculating processing by said calculating means and the updating processing by said updating means are repeated a plurality of number of times.

11. (Original) The picture processing apparatus according to claim 9 wherein said value not dependent on the input picture is found in advance from a plurality of pixels.

12. (Currently Amended) A picture processing apparatus comprising:
holding means for holding a non-Huber function picture energy function, that does not contain a Huber function, prepared in advance and varied depending on an input picture;
enlarging means for enlarging the input picture;
calculating means for calculating an energy decreasing value for a pixel in the enlarged picture using said energy function; and
updating means for adding said energy decreasing value to said pixel and for updating the resulting pixel value.

13. (Original) The picture processing apparatus according to claim 12 wherein said holding means holds the sum total of pixel energies varied depending on pixel values of plural pixels in the vicinity of each pixel as a function of the energy of the picture varied depending on said input picture.

14. (Original) The picture processing apparatus according to claim 12 wherein said updating means adds a product of a gradient value of said energy function in a pixel in the enlarged picture with a value not dependent on the input picture as said energy decreasing value to said pixel.

15. (Original) The picture processing apparatus according to claim 12 wherein said calculating operation by said calculating means and said updating operation by said updating means are repeated a plurality of number of times.

16. (Currently Amended) A picture processing apparatus comprising:

holding means for holding a non-Huber function picture energy function, that does not contain a Huber function, prepared in advance;

enlarging means for enlarging an input picture;

calculating means for calculating an energy decreasing value for a pixel of the picture enlarged by said enlarging means using said energy function; and

updating means for adding said energy decreasing value to said pixel to update the pixel value;

said calculation operation by said calculating means and the updating operation by said updating means being repeated a pre-set number of times.